

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0120235; AI 125944; PER20080001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: Southeastern Louisiana Water & Sewer Company, LLC
West St. Tammany Regional Sewage Treatment Plant
350 North Causeway Boulevard
Mandeville, LA 70448

II. PREPARED BY: Eura DeHart

DATE PREPARED: August 5, 2008

III. PERMIT ACTION: LPDES permit LA0120235, AI 125944; PER20080001

LPDES Permit issued: May 20, 2005
LPDES Permit expires: June 30, 2010

IV. MODIFICATION TO THE PERMIT:

The discharge location for Outfall 001 has been changed to Latitude 30° 27' 43" North, Longitude 90° 11' 20" West.

The discharge route for Outfall 001 has been changed to Fox Branch, thence into Bedico Creek.

Part II, Section A.1 (permit reopener) has been amended and Part II, Section B added to include requirements for acceptance of sewage sludge.

V. FACILITY INFORMATION:

- A. The discharge of treated sanitary wastewater is from a privately owned treatment works serving a number of residential subdivisions and light commercial businesses.
- B. The facility is located on the north side of Highway 1085, west of Highway 1077, in the Northpoint Industrial Park in Madisonville, St. Tammany Parish.
- C. The treatment facility consists of an extended aeration mechanical treatment plant with an activated sludge return process. The unit will include an on-site digester, an equalization/surge tank, clarifier capacity chambers, and tertiary sand filters. Disinfection is by chlorination.

D. Outfall 001

Discharge Location: Latitude 30° 27' 43" North
Longitude 90° 11' 20" West

Description: treated sanitary wastewater

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Design Flow: 0.50 MGD

Type of Flow Measurement which the facility is currently using:

Continuous Recorder with 90' V-Notch Weir Staff Gauge

VI. RECEIVING WATERS:

The discharge is into Fox Branch, thence into Bedico Creek in segment 040702 of the Lake Pontchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040702 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040702 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VII. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040702 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the gulf sturgeon, which is listed as a threatened/endangered species. The proposed permit is for a sanitary sewage treatment facility (not covered under a General Permit) and is located in a sensitive area. As set forth in the Memorandum of Understanding between the LDEQ and the FWS and in accordance with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ), this draft permit has been submitted to the FWS for review. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

VIII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

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IX. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

X. PROPOSED PERMIT LIMITS:

Subsegment 040702, Tangipahoa River – From I-12 to Lake Pontchartrain, is listed on LDEQ's Final 2006 303(d) List as impaired for ammonia (EPA – Category 5), nutrients (EPA – Category 5), mercury, and dissolved oxygen (EPA – Category 5). To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Nutrients, Dissolved Oxygen, and Ammonia

LDEQ's position on nutrients, as supported by the ruling in *Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients in similar discharges where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through a CBOD₅ limitation. Compliance with the CBOD₅ limitation as the indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with Part I of the permit in addition to LDEQ's ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Part II of the final permit allows the

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Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards. Limitations for ammonia have been set in accordance with the St. Tammany Parish Areawide Policy.

Mercury

To protect against the discharge of mercury at levels exceeding the state water quality standards and for informational purposes for future TMDL development, a reporting requirement for mercury shall be placed into the permit. This permit may be reopened in the future to impose a mercury limitation as a result of the TMDL.

Final Effluent Limits:**OUTFALL 001**

The final effluent limitations are the same as the existing permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	41.7	10 mg/l	15 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
TSS	62.6	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	20.9	5 mg/l	10 mg/l	Limits are set in accordance with the St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
Mercury	Report	Report	Report	Because the receiving waterbody is impaired for mercury, "Report" of mercury is proposed for information gathering purposes.

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Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

XI.**TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit modification for the discharge described in this Statement of Basis.

XII.**REFERENCES:**

Louisiana Water Quality Management Plan, Vol. 8, "Wasteload Allocations and Discharger Inventory," Louisiana Department of Environmental Quality, 1992.

Louisiana Water Quality Management Plan, Vol. 5-B, "Water Quality Inventory," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

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LPDES Permit Application to Discharge Wastewater, Southeastern Louisiana Water & Sewer Company, LLC, West St. Tammany Regional Sewage Treatment Plant, November 17, 2004.

LPDES Permit Number LA0120235, Southeastern Louisiana Water & Sewer Company, LLC, West St. Tammany Regional Sewage Treatment Plant, Issued May 20, 2005.

Notification of acceptance of sewage sludge, Southeastern Louisiana Water & Sewer Company, LLC, West St. Tammany Regional Sewage Treatment Plant, Received August 28, 2007.

LPDES Permit Modification Request, Southeastern Louisiana Water & Sewer Company, LLC, West St. Tammany Regional Sewage Treatment Plant, Received May 8, 2008.